

EXAMINER'S AMENDMENT

This is in response to the Applicant's response filed on September 23, 2010. Claim 4 has been cancelled by the Applicant. Claims 1, 2, 14, 16 – 18, and 22 have been amended. Claim 27 has been added. Claims 1 – 3, 7 – 9, 14 – 19, and 21 – 27, where Claims 1, 16, and 18 are in independent form, are presented for examination.

Claims 1, 2, 16, 18, and 24 and 25 have been amended to provide more active recitation of the disclosed method and associated non-transitory computer-readable medium and apparatus.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jason Amsel on December 14, 2010 and communicated via email on December 14, 2010. The interview was conducted to provide recitations that better describe the distinctive features of the claimed invention over the prior art of record

The application has been amended as follows:

Claim 1: A method for countering spam that disguises characters within an electronic message, the method implemented on a computer, the method comprising the steps of:

locating portions of the electronic message where a difference in color between foreground color and background color is negligible, the locating performed by a processor of the computer, the locating comprising:

determining whether at least one of the foreground color and the background color is a gray-scale color; and

responsive to at least one of the foreground color and the background color being a gray-scale color, determining a difference in saturation between the foreground color and the background color, determining a difference in brightness between the foreground color and the background color, and deeming the difference in color between the foreground color and the background color to be negligible based on the difference in the saturation and the difference in brightness between the colors regardless of hue values of the colors, said deeming further comprises:

determining that the difference between the colors falls below a negligibility threshold, the negligibility threshold used depending upon a type of monitor on which the electronic message is to be displayed;
deleting from the electronic message foreground characters from said portions, to form a redacted electronic message; and
forwarding the redacted electronic message to a spam filter.

Claim 2: The method of claim 1 wherein the negligibility threshold is set such that when the difference between foreground color and background color is below the

negligibility threshold for a certain portion of the electronic message, said portion is invisible or illegible to a typical human viewer of the electronic message.

Claim 16: A non-transitory computer-readable storage medium containing executable computer program instructions for countering spam that disguises characters within an electronic message, said computer program instructions performing the steps of:

locating portions of the electronic message where a difference in color between foreground color and background color is negligible, the locating comprising:

determining whether at least one of the foreground color and the background color is a gray-scale color; and

responsive to at least one of the foreground color and the background color being a gray-scale color, determining a difference in saturation between the foreground color and the background color, determining a difference in brightness between the foreground color and the background color, and deeming the difference in color between the foreground color and the background color to be negligible based on the difference in the saturation and the difference in brightness between the colors regardless of hue values of the colors, said deeming further comprising:

determining that the difference between the colors falls below a negligibility threshold, the negligibility threshold used depending upon a type of monitor on which the electronic message is to be displayed;

deleting from the electronic message foreground characters from said portions, to form a redacted electronic message; and
forwarding the redacted electronic message to a spam filter.

Claim 18: An apparatus for countering spam in an electronic message, said apparatus comprising: at least one processor;

at least one non-transitory computer-readable storage medium containing executable computer program instruction for countering spam that disguises characters within an electronic message, said computer program instructions performing the steps of:

locating portions of the electronic message where a difference in color between foreground color and background color is negligible, the locating comprising:

determining whether at least one of the foreground color and the background color is a gray-scale color; and responsive to at least one of the foreground color and the background color being a gray-scale color, determining a difference in saturation between the foreground color and the background color, determining a difference in brightness between the foreground color and the background color, and deeming the difference in color between the foreground color and the background color to be negligible based on the difference in the saturation and the difference in brightness between the colors regardless of hue values of the colors, said deeming further comprises:

determining that the difference between the colors falls below a negligibility threshold, the negligibility threshold used depending upon a type of monitor on which the electronic message is to be displayed; deleting from the electronic message foreground characters from said portions, to form a redacted electronic message; and forwarding the redacted electronic message to a spam filter.

Claim 24: The method of claim 2, wherein the negligibility threshold used when the electronic message is to be displayed on a liquid crystal display (LCD) monitor is different than a negligibility threshold used when the electronic message is to be displayed on a cathode ray tube (CRT) monitor.

Claim 25: The method of claim 2, wherein at least one of the foreground color and the background color is a gray-scale color, and wherein a negligibility threshold used when the electronic message is to be displayed on a liquid crystal display (LCD) monitor is less than a negligibility threshold used when the electronic message is to be displayed on a cathode ray tube (CRT) monitor.

Allowable Subject Matter

Claims 1 – 3, 7 – 9, 14 – 19, and 21 – 27 are allowed.

The following is an examiner's statement of reasons for allowance: (See also Applicant's Remarks filed on September 23, 2010).

The prior art of record fails to teach or fairly suggest of a method, computer-readable storage medium, and apparatus that are used for locating portions of the electronic message where a difference in color between foreground color and background color is negligible by determining a difference in saturation between the foreground color and the background color, determining a difference in brightness between the foreground color and the background color, and deeming the difference in color between the foreground color and the background color to be negligible based on the difference in the saturation and the difference in brightness between the colors regardless of hue values of the colors, deleting from the electronic message foreground characters from said portions, to form a redacted electronic message, and forwarding the redacted electronic message to a spare filter, said deeming further comprises of determining that the difference between the colors falls below a negligibility threshold, the negligibility threshold used depending upon a type of monitor on which the electronic message is to be displayed, in the particular manner and combinations recited in Claims 1, 16, and 18.

Claims 2, 3, 7 – 9, 14, 15, 17, 19, and 21 – 27 are also allowable since they depend on Claims 1, 16, or 18.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae K. Kim, whose telephone number is (571) 270-1979. The examiner can normally be reached on Monday - Friday (10:00 AM - 8:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas, can be reached on (571) 272-6776. The fax phone number for submitting all Official communications is (703) 872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the examiner at (571) 270-2979.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

/Tae K. Kim/

Tae K. Kim
Examiner, Art Unit 2492

December 14, 2010

/JOSEPH THOMAS/
Supervisory Patent Examiner, Art Unit 2492